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REDAC SOFTWARE LIMITED
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                                     SUITE
                                                    : P.C.B. LAYOUT
                                     PROGRAM TITLE : REDAL3 MK5
                                /2
                                /3
                                     ROUTINE TITLE : HIHO2
                                     THIS PROGRAM SOURCE FILE IS SUPPLIED IN CONFIDENCE TO THE
                                     CUSTOMER; THE CONTENTS OR DETAILS OF ITS OPERATION MAY
10
                                     ONLY BE DISCLOSED TO PERSONS EMPLOYED BY THE CUSTOMER WHO
11
                                     REQUIRE A KNOWLEDGE OF THE SOFTWARE CODING TO CARRY OUT
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                                     THEIR JOB. DISCLOSURE TO ANY OTHER PERSON MUST HAVE PRIOR
                                     AUTHORISATION FROM THE DIRECTORS OF REDAC SOFTWARE LIMITED.
                                     AUTHOR: K. FOSTER
                               74
                                ⁄5
                                    DATE : JAN 1965
18
19
                                76
                                    PURPOSE: DRIVE DEC TAPE INPUT/OUTPUT
201233456789012334567
                                     CALLING SEQUENCE AND DESCRIPTION OF ARGUMENTS
                                     CALL HIHO2(MODE)
                                           MODE =0 OLD FORMAT
                                                 NON ZERO NEW FORMAT
                                    I/O DEVICES AND FUNCTIONS: IDEV=3 FOR INPUT AND OUTPUT
                                /8
                                79
                                    LOCAL GLOBALS
                                 .GLOBL HIHO2

∠10 EXTERNAL GLOBALS

                                .GLOBL NAME, MESS2, DIRECT, DRAWCP, BUTTON, DUMPIO, ASS2
                                .GLOBL DUMP,.DA

∠11 COMMON AREAS

                                .XXMON .CBD .XX 1
          00000 R 000000 A
38
                               EOCOPP .CBD EOCOPP 1
          00001 R 000000 A
                               EOBRD .CBD EOBRD 1
39
          00002 R 000000 A
                               EOLIB .CBD EOLIB 1
40
          00003 R 000000 A
41
          00004 R 000000 A
                               EOCONN .CBD EOCONN 1
42
43
                               EOCOMP .CBD EOCOMP 1
          00005 R 000000 A
          00006 R 000000 A
                               EOROUT .CBD EOROUT 1
44
45
46
47
                   641000 A
                               ECLA=641000

∠EAE CLEAR ACCUMULATOR

                   000003 A
                               IDEV=3 /I/O DAT SLOT
                                .EJECT
```

PAGE

1

HIHOZ SRC

```
PAGE
             HIHOZ SRC
  49
            00007 R 000000 A
                                 HIHO2 0
  50
            00010 R 120713 E
                                  JMS* .DA
                                  JMP .+1+1
  51
            00011 R 600013 R
 52
            00012 R 000000 A
                                 TYPE
 53
                                  LAC* TYPE
            00013 R 220012 R
 54
55
            00014 R 740200 A
                                  SZA
            00015 R 600021 R
                                  JMP ON /IS NEW DUMP TYPE
  56
            00016 R 220003 R
                                  LAC* EOLIB
            00017 R 540714 R
 57
                                  SAD (1
                                  JMP EXIT ∠NO DATA IN SO DON'T DUMP
  58
            00020 R 600265 R
 59
            00021 R 735000 A
                                 ON CLX
            00022 R 200715 R
                                  LAC (6
  60
 61
            00023 R 722000 A
                                  PAL
 62
            00024 R 230000 R
                                 LUP LAC* .XXMON,X
            00025 R 050675 R
                                  DAC COPPER, X /COPY D.S. POINTERS INTO LOCAL VARIABLES
  63
            00026 R 725001 A
                                  AXS 1
  64
 65
            00027 R 600024 R
                                  JMP LUP
  66
                                 START LAC (12
  67
            00030 R 200716 R
            00031 R 040670 R
                                  DAC NAME 1
  68
  69
            00032 R 120712 E
                                  JMS* NAME /READ FILENAME
 70
            00033 R 600035 R
                                  JMP .+1+1
 71
                                  .DSA NAME1
            00034 R 000670 R
  72
73
            00035 R 120711 E
                                  JMS* MESS2 /DISPLAY MESSAGE
            00036 R 600040 R
                                  JMP .+1+1
.DSA THOU
  74
            00037 R 000266 R
 75
            00040 R 600045 R
                                  JMP FOR33
            00041 R 241471 A
                                  .ASCII /(3H _)/
  76
            00042 R 020100 A
            00043 R 575220 A
            00044 R 000000 A
            00045 R 120703 E
                                 FOR33 JMS* ASS2 /PLUG DEC TAPE HANDLER INTO DAT SLOT 3
  77
                                  .INIT IDEV.0.0
  78
            00046 R 000003 A *G
                                          CAL+0*1000 IDEV&777
            00047 R 000001 A *G
            00050 R 000000 A *G
                                          0+0
            00051 R 000000 A *G
                                   .FSTAT IDEV, NAME 1
  79
            00052 R 003003 A *G
                                          CAL+3000 IDEV&777
            00053 R 000002 A *G
            00054 R 000670 R *G
                                          NAME 1
                                  DAC FILEXS
            00055 R 040674 R
  80
  81
            00056 R 220003 R
                                  LAC* EOLIB
            00057 R 540714 R
                                  SAD (1 /LIBRARY EMPTY?
  82
                                  JMP READ YES. MUST BE READ MODE
            00060 R 600224 R
  83
                                  .EJECT
```

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PAGE
              HIHOZ SRC
  85
                                        WRITE MODE
  86
  87
             00061 R
                                    WRITE .CLOSE IDEV
  88
             00061 R 000003 A *G
                                             CAL IDEV&777
             00062 R 000006 A *G
00063 R 140667 R
                                     DZM MODE /SET WRITE MODE
  89
             00064 R 200674 R
00065 R 741200 A
                                     LAC FILEXS
  90
                                     SNA /FILE EXISTS?
  91
             00066 R 600125 R
                                     JMP TRANSW /NO. GO AND WRITE FILE
  92
             00067 R 120711 E
00070 R 600072 R
                                     JMS* MESS2 /DISPLAY MESSAGE
  93
                                     JMP .+1+1
  94
  95
96
             00071 R 000266 R
                                     .DSA THOU
             00072 R 600117 R
                                     JMP FOR32
             00073 R 241506 A
  97
                                     .ASCII /(46H KEY OP, 1 OVERWRITE, 2, 3, 4, 5, 6/
             00074 R 644100 A
             00075 R 456133 A
00076 R 120236 A
             00077 R 501304 A
             00100 R 030500 A
             00101 R 202372 A
             00102 R 642644 A
             00103 R 536451 A
             00104 R 152212 A
             00105 R 261006 A
00106 R 226100 A
             00107 R 315304 A
             00110 R 032130 A
             00111 R 201525 A
             00112 R 420154 A
  98
             00113 R 201012 A
                                     .ASCII / RENAME_)/
             00114 R 242634 A
             00115 R 406330 A
             00116 R 557522 A
00117 R 120704 E
                                    FOR32 JMS* BUTTON /READ KEYS
 99
 100
             00120 R 540714 R
                                     SAD (1
             00121 R 600125 R
                                     JMP TRANSW /OVERWRITE
 101
 102
             00122 R 540715 R
                                     SAD (6
 103
             00123 R 600030 R
                                     JMP START ∕RENAME
             00124 R 600117 R
                                     JMP FOR32 /IGNORE
 104
 105
 106
 107
             00125 R 120705 E
                                    TRANSW JMS* DIRECT /FIND HOW MUCH SPACE ON DEC TAPE
                                    JMP .+1+3
.DSA (IDEV
             00126 R 600132 R
 108
             00127 R 000717 R
 109
                                     .DSA ISP
 110
             00130 R 000673 R
                                     .DSA BUFF
             00131 R 000267 R
 111
                                     .INIT IDEV, 1, 0
 112
                                             CAL+1*1000 IDEV&777
             00132 R 001003 A *G
             00133 R 000001 A *G
                                             1
             00134 R 000000 A *G
                                             0+0
             00135 R 000000 A *G
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PAGE
              HIHOZ SRC
 113
             00136 R 220003 R
                                     LAC* EOLIB /EVALUATE FILE SIZE
 114
             00137 R 360004 R
                                     TAD* EOCONN
             00140 R 360005 R
                                     TAD* EOCOMP
 115
             00141 R 360006 R
                                     TAD* EOROUT
 116
                                     .DEC
 117
 118
             00142 R 340720 R
                                     TAD (900
             00143 R 653000 A
 119
                                     LMQ!ECLA
             00144 R 744000 A
 120
                                     CLL
             00145 R 640323 A
00146 R 000400 A
 121
                                     DIV
 122
                                     256
 123
                                     .OCT
 124
             00147 R 641002 A
                                     LACQ
 125
126
127
             00150 R 740030 A
                                     IAC /ACC NOW HOLDS FILE SIZE
             00151 R 740031 A
                                     TCA
             00152 R 340673 R
                                     TAD ISP
 128
             00153 R 740100 A
                                     SMA /SUFFICIENT ROOM ON DEC TAPE?
                                     JMP TRANS2 /YES
JMS* MESS2 /DISPLAY MESSAGE
             00154 R 600211 R
 129
             00155 R 120711 E
 130
                                     JMP .+1+1
             00156 R 600160 R
 131
             00157 R 000266 R
 132
                                     .DSA THOU
 133
             00160 R 600207 R
                                     JMP FOR43
                                     .ASCII /(49H DECTAPE FULL, MOUNT ANOTHER, B/
 134
             00161 R 241507 A
             00162 R 144100 A
00163 R 422130 A
00164 R 352202 A
00165 R 502124 A
             00166 R 043252 A
             00167 R 462305 A
             00170 R 420232 A
             00171 R 476531 A
             00172 R 652100 A
             00173 R 406351 A
00174 R 752220 A
             00175 R 426445 A
             00176 R 420204 A
00177 R 526512 A
 135
                                     .ASCII /UTTON TO, RESTART_)/
             00200 R 447634 A
             00201 R 202511 A
             00202 R 726100 A
             00203 R 512132 A
             00204 R 352202 A
             00205 R 512513 A
             00206 R 724400 A
 136
137
             00207 R 120704 E
                                    FOR43 JMS* BUTTON /WAIT FOR KEY HIT
             00210 R 600061 R
                                     JMP WRITE /TRY AGAIN
 138
                                    TRANS2 .ENTER IDEV, NAME 1
             00211 R
 139
             00211 R 000003 A *G
                                             +CAL*1000 IDEV&777
             00212 R 000004 A *G
             00213 R 000670 R *G
                                             NAME 1
 140
             00214 R 220012 R
                                     LAC* TYPE
             00215 R 740200 A
                                     SZA /DUMP TYPE?
 141
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PAGE	5	HIHOZ	SRC	
142 143 144 145			600257 R	JMP RANS NEW OLD TYPE OF DUMP
146 147 148 149 150 151		00221 R 00222 R	600223 R 000667 R	JMS* DUMPIO JMP .+1+2 .DSA MODE .DSA (IDEV JMP DONE .EJECT

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PAGE
               HIHOZ SRC
 152
 153
                                       READ MODE
 154
 155
                                       READ CLA! IAC
              00224 R 750030 A
                                        DAC MODE /SET READ MODE
              00225 R 040667 R
 156
              00226 R 200674 R
00227 R 740200 A
 157
                                        LAC FILEXS
                                        SZA /FILE EXISTS?
JMP TRANS3 /YES
 158
              00230 R 600254 R
00231 R 120711 E
 159
                                        JMS* MESS2
 160
              00232 R 600234 R
00233 R 000266 R
00234 R 600253 R
                                        JMP .+1+1
 161
                                        .DSA THOU
 162
                                        JMP FOR31
 163
              00235 R 241446 A
00236 R 644100 A
                                        .ASCII /(26H FILE ABSENT, RETYPE NAME_)/
 164
              00237 R 432231 A
              00240 R 442500 A
              00241 R 406052 A
00242 R 342634 A
00243 R 521304 A
00244 R 051212 A
              00245 R 522632 A
00246 R 042500 A
              00247 R 472031 A
              00250 R 542676 A
00251 R 244000 A
              00252 R 000000 A
              00253 R 600030 R
                                       FOR31 JMP START
 165
 166
              00254 R
00254 R 000003 A *G
                                       TRANS3 .SEEK IDEV, NAME1
 167
                                        CAL IDEV&777
              00255 R 000003 A *G
                                                3
              00256 R 000670 R *G
00257 R 120707 E
00260 R 600263 R
                                        NAME 1
                                       TRANS JMS* DUMP /WRITE/READ DUMP
 168
                                       JMP .+1+2
.DSA (IDEV
 169
              00261 R 000717 R
 170
 171
              00262 R 000667 R
                                        .DSA MODE
              00263 R 651000 A
                                      DONE ECLA!CLQ
 172
              00264 R 120706 E
                                       - JMS* DRAWCP ∕REDRAW PICTURE
 173
 174
              00265 R 620007 R
                                       EXIT JMP* HIHO2
 175
 176
177
                                        .DEC
 178
 179
              00266 R 001750 A
                                       THOU 1000
                                        .OCT
 180
              00267 R
                                       BUFF .BLOCK 400
 181
              00667 R 000000 A
                                       MODE /I/O MODE
 182
              00670 R A
                                       NAME1 .BLOCK 3 /FILENAME AND EXTENSION (SIXBIT)
 183
              00673 R 000000 A
                                       ISP /SPACE ON DEC TAPE
 184
                                      FILEXS / REPLY FROM . FSTAT ON FILE
              00674 R 000000 A
 185
              00675 R 000000 A
                                       COPPER
 186
              00676 R 000000 A
                                       BOARD
 187
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PAGE	7	HIHOZ SRC
188 189 190 191 192		00677 R 000000 A LIB O7700 R 000000 A CONN 00701 R 000000 A COMP 00702 R 000000 A ROUTE 000000 A .END 00703 R 000703 E *E 00704 R 000704 E *E 00705 R 000705 E *E 00707 R 000707 E *E 00710 R 000710 E *E 00711 R 000711 E *E 00712 R 000712 E *E 00713 R 000713 E *E 00714 R 000001 A *L 00715 R 000003 A *L 00717 R 000003 A *L 00720 R 001604 A *L 00720 R 001604 A *L 00720 R 001604 A *L

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PAGE 8	HIHOZ CRO	SS REFE	RENCE					
ASS2 0070 BOARD 006	76 187*	77						
BUFF 0020 BUTTON 0070 COMP 0070	ð4 33	181* 99	136					
CONN 0070 COPPER 0061 DIRECT 0070	75 63	186* 107						
DONE 0020 DRAWCP 0070	63 150 06 33	172* 173						
DUMP 0070 DUMPIO 007 ECLA 64100	10 33	168 146 119	172					
EOBRD 0000 EOCOMP 0000	35 42×	39 42	115					
EOCONN 0000 EOCOPP 0000	01 38*	41 38	114 56	81	113			
EOLIB 0000 EOROUT 0000	36 43×	40 43 174*	116	01	115			
EXIT 0029 FILEXS 006 FOR31 0025	74 80	90 165*	157	185*				
FOR32 001 FOR33 000	17 96	99* 77*	104					
FOR43 0020 HIHO2 0000	37 30	136* 49*	174	00	100	110	139	149
IDEV 00000	167	78 170 127	79 184*	88	109	112	139	149
LIB 006 LUP 000	77 188* 24 62*	65						
MESS2 007 MODE 0060	87 89	72 148	93 156	130 171	160 182*			
NAME 007 NAME1 006 ON 000	70 68	69 71 59*	79	139	167	183 *		
READ 0027	24 83	155*	•					
START 000: THOU 002:	30 67* 66 :74	103 95	165 132	1 62	179*			
TRANS 0025 TRANSW 0015 TRANS2 002	25 92	168* 101 139*	107*					
TRANS3 002: TYPE 000	54 159 12 52*	167* 53	140					
WRITE 000 .DA 007 .XXMON 000	13 34	137 50 62						
.XXMON 000	oo 31↑	02						